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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,027	05/17/2006	Keith Raymond Morgan	65503-004US1	6052

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EXAMINER	
WATTS, JENNA A	

ART UNIT	PAPER NUMBER
1794	

NOTIFICATION DATE	DELIVERY MODE
08/11/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

INFO@ORTPATENT.COM

Office Action Summary	Application No.	Applicant(s)	
	10/563,027	MORGAN, KEITH RAYMOND	
	Examiner	Art Unit	
	JENNA A. WATTS	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *7/08/2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27,30,33 and 34* is/are pending in the application.

4a) Of the above claim(s) *11-24,33 and 34* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,25-27 and 30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20051230, 20070129*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, Claims 1-10, 25, 26, 27 and 30 in the reply filed on 7/08/2009 is acknowledged.

2. Claims 11-24, 33 and 34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/08/2009.

Claim Objections

3. Claim 8 is objected to because of the following informalities: there are spaces missing between "approximately" and "500,000 Daltons", between "Daltons" and "and", between "approximately" and "0.5%" and there appears to be a typographical error in the stating of the percentage of 0.5% where a semi-colon is used instead of a colon. Appropriate correction is required.

Specification

4. The abstract of the disclosure is objected to because there are two abstracts of different length present in the file and it is unclear which one is presented for examination. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-10, 26, 27 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Regarding Claims 1-3 in particular, it is unclear whether Applicant is claiming a processed cereal grain product that is a result of the process claimed or one that is used in the process claimed. For the purposes of examination, Claims 1-3 will be treated as being only directed to a processed cereal grain product.

8. Claim 25 is dependent on Claim 11, which has been withdrawn from prosecution due to the restriction requirement, and therefore, Claim 25 is considered indefinite since it depends from a withdrawn claim.

9. Regarding Claim 26, it is unclear whether the beta-glucan-containing product claimed refers to the beta-glucan containing processed cereal grain product as claimed in Claim 1 or a product comprising the released beta-glucan, also mentioned in Claim 1. For the purposes of examination, the claim will be interpreted to mean a food containing a beta-glucan containing product, comprising the released beta-glucan.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1, 4-10, 26 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan (U.S.P.A. No. 2002/0192770).**

12. Regarding Claims 1, 4 and 8, Morgan teaches a beta-glucan-containing processed cereal grain product (Page 1, Paragraphs 2 and 5 and Page 2, Paragraph 41). Morgan teaches that the cereal, which may be in the form of whole grain, bran, pollard, flour or other powder milled to a desired particulate size (Page 2, Paragraph 41), thus the cereal grain product is deemed processed. Morgan further teaches that when the cereal product is mixed with water at temperature of between approximately 0 to 55°C (Page 2, Paragraph 34 and 41), it releases at least approximately 60% of the beta-glucan into the water because Morgan teaches that the beta-glucan is extracted into solution (Page 2, Paragraph 41), thus the beta-glucan is deemed to be released into the water. Morgan further teaches that the resultant beta-glucan product has been found to be of high purity, generally 70% by weight of the total solids or greater (Page 3, Paragraph 48), thus it would be expected that this amount of beta-glucan has been released into solution in order to form the resultant product. Morgan further teaches that the beta glucan so released has an average molecular weight at least greater than approximately 100,000 or 500,000 Daltons because Morgan teaches that the average molecular weight may be in the range of 1,500,000, preferably up to 600,000 (Page 2, Paragraph 42).

13. Regarding Claims 5 and 6, Morgan teaches that the beta-glucan-containing processed cereal product is derived from cereal having a beta-glucan content greater than 6% by weight and greater than 9% by weight (Page 1, Paragraph 2).

14. Regarding Claim 7, Morgan further teaches that the beta-glucan content is greater than approximately 90% by weight of the total precipitate (Page 3, Paragraph 48 and Page 7, Claim 24), thus it would be expected that this amount of beta-glucan was released to form the precipitate.

15. Regarding Claim 9, Morgan teaches that the beta-glucan-containing cereal grain product contains additional components because Morgan teaches the addition of acid or enzymes to the mixture (Page 2, Paragraph 37).

16. Regarding Claim 10, Morgan teaches the use of starch degrading enzymes (Page 2, Paragraph 38), and further teaches that cooling the aqueous solution of beta-glucan may lead to a formation of a gel (Page 2, Paragraph 39), either activity being expected to physically modify the starch within the cereal grain product.

17. Regarding Claims 26 and 30, Morgan teaches a food product comprising the beta-glucan containing product and also teaches a pharmaceutical composition comprising a beta-glucan containing product (Page 1, Paragraphs 1, 4, 27, Page 3, Paragraphs 58, 59 and 61, and Page 6, Examples 14-16 and Paragraph 105).

18. **Claims 1, 4-10, 26 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Morgan (U.S. Patent No. 6,426,201).**

19. Regarding Claims 1, 4 and 8, Morgan teaches a beta-glucan-containing processed cereal grain product (Column 1, lines 14-16 and 34-36 and Column 3 , lines 65-67). Morgan teaches that the cereal, which may be in the form of whole grain, bran, pollard, flour or other powder milled to a desired particulate size (Column 3, lines 35-67), thus the cereal grain product is deemed processed. Morgan further teaches that when the cereal product is mixed with water at temperature of between approximately 0 to 55°C (Column 3, lines 37-40), it releases at least approximately 60% of the beta-glucan into the water because Morgan teaches that the beta-glucan is extracted into solution (Column 4, lines 1-4), thus the beta-gluten is deemed to be released into the water. Morgan further teaches that the resultant beta-glucan product has been found to be of high purity, generally 70% by weight of the total solids or greater (Column 4, lines 47-52), thus it would be expected that this amount of beta-glucan has been released into solution in order to form the resultant product. Morgan further teaches that the beta glucan so released has an average molecular weight at least greater than approximately 100,000 or 500,000 Daltons because Morgan teaches that the average molecular weight may be in the range of 1,500,000, preferably up to 600,000 (Column 4, lines 9-12).

20. Regarding Claims 5 and 6, Morgan teaches that the beta-glucan-containing processed cereal product is derived from cereal having a beta-glucan content greater than 6% by weight and greater than 9% by weight (Column 1, lines 13-15).

21. Regarding Claim 7, Morgan further teaches that the beta-glucan content is greater than approximately 90% by weight of the total precipitate (Column 4, lines 49-52

and Column 12, lines 38-40), thus it would be expected that this amount of beta-glucan was released to form the precipitate.

22. Regarding Claim 9, Morgan teaches that the beta-glucan-containing cereal grain product contains additional components because Morgan teaches the addition of acid or enzymes to the mixture (Column 3, lines 50-52).

23. Regarding Claim 10, Morgan teaches the use of starch degrading enzymes (Column 3, lines 54-56), and further teaches that cooling the aqueous solution of beta-glucan may lead to a formation of a gel (Column 3, lines 57-59), either activity being expected to physically modify the starch within the cereal grain product.

24. Regarding Claims 26 and 30, Morgan teaches a food product comprising the beta-glucan containing product and also teaches a pharmaceutical composition comprising a beta-glucan containing product (Column 1, lines 7-8 and 29-32, Column 2, lines 48-54, Column 5, lines 37-40, 45-46, 61-62, and Examples 14-16).

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

26. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

27. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U.S.P.A. No. 2002/0192770) in view of Cahill, Jr. et al. (U.S.P.A. No. 2002/0106430).**

28. Morgan '770 is relied upon as cited above in the rejection of Claim 26.

29. Morgan '770 is taken as cited above in the rejection of Claim 26, however, Morgan '770 does not specifically teach that the food product is bread, pasta or processed food bar.

30. Cahill Jr. teaches foods comprising a beta-glucan containing product (Page 1, Paragraph 1 and 6), where at least 80% of the beta-glucan is extracted and recovered from processed cereal grain products and then added to various food products (Page 1, Paragraph 6 and 9). Cahill Jr. teaches that any food product can be used for the purposes of the invention, such as baked goods, health bars, etc. (Page 1, Paragraph 9). Breads would be considered examples of baked goods and health bars are deemed processed food bars in view of Applicant's specification on Page 13, lines 20-21).

31. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, for the food product comprising a beta-glucan containing product, as taught by Morgan '770, to have been a food such as a processed food bar, as taught by Cahill Jr., because Cahill Jr. teaches that any food product, such as a health bar, would be suitable to be used as a beta-glucan-containing food product and one of

ordinary skill in the art would have expected a reasonable degree of success, in light of Cahill Jr., to use a food product such as a health bar as a vehicle for providing beta-glucan, in order to provide consumers with a nutritionally enhanced food product.

32. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan (U.S. Patent No. 6,426,201) in view of Cahill, Jr. et al. (U.S.P.A. No. 2002/0106430).**

33. Morgan '201 is relied upon as cited above in the rejection of Claim 26.

34. Morgan '201 is taken as cited above in the rejection of Claim 26, however, Morgan '201 does not specifically teach that the food product is bread, pasta or processed food bar.

35. Cahill Jr. teaches foods comprising a beta-glucan containing product (Page 1, Paragraph 1 and 6), where at least 80% of the beta-glucan is extracted and recovered from processed cereal grain products and then added to various food products (Page 1, Paragraph 6 and 9). Cahill Jr. teaches that any food product can be used for the purposes of the invention, such as baked goods, health bars, etc. (Page 1, Paragraph 9). Breads would be considered examples of baked goods and health bars are deemed processed food bars in view of Applicant's specification on Page 13, lines 20-21).

36. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, for the food product comprising a beta-glucan containing product, as taught by Morgan '201, to have been a food such as a processed food bar, as taught by Cahill Jr., because Cahill Jr. teaches that any food product, such as a health bar,

would be suitable to be used as a beta-glucan-containing food product and one of ordinary skill in the art would have expected a reasonable degree of success, in light of Cahill Jr., to use a food product such as a health bar as a vehicle for providing beta-glucan, in order to provide consumers with a nutritionally enhanced food product.

Claim Rejections - 35 USC § 102/Claim Rejections - 35 USC § 103

37. **Claims 1-3 and 25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morgan (U.S.P.A. No. 2002/0192770).**

38. Applicants' Claims 1-3 and 25 are written in a product-by-process format and as such, it is the novelty of the instantly claimed product that needs to be established and not that of the recited process steps. In re Brown, 173 USPQ 685 (CCPA 1972); In re Wertheim, 191 USPQ (CCPA 1976). Regarding Claims 1-3, since the product shown by this reference is a processed cereal grain product, the product is met. Regarding Claim 25, Morgan teaches the process of Claim 11, because Morgan teaches a method for producing a beta-glucan containing product where the beta-glucan containing cereal grain is heated above approximately 60°C in the presence of greater than approximately 50% water by weight, followed by drying (Page 2, Paragraphs 34 and 46 and Page 4, Paragraph 67). Therefore, the product produced by the claimed process, as claimed in Claim 25, is deemed to be met by Morgan.

39. **Claims 1-3 and 25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morgan (U.S. Patent No. 6,426,201).**

40. Applicants' Claims 1-3 and 25 are written in a product-by-process format and as such, it is the novelty of the instantly claimed product that needs to be established and not that of the recited process steps. In re Brown, 173 USPQ 685 (CCPA 1972); In re Wertheim, 191 USPQ (CCPA 1976). Regarding Claims 1-3, since the product shown by this reference is a processed cereal grain product, the product is met. Regarding Claim 25, Morgan teaches the process of Claim 11, because Morgan teaches a method for producing a beta-glucan containing product where the beta-glucan containing cereal grain is heated above approximately 60°C in the presence of greater than approximately 50% water by weight, followed by drying (Column 3, lines 37-40, Column 4, lines 36-44 and Column 6, Example 2). Therefore, the product produced by the claimed process, as claimed in Claim 25, is deemed to be met by Morgan.

Conclusion

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNA A. WATTS whose telephone number is (571) 270-7368. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. SAYALA/
Primary Examiner, Art Unit 1794

/JENNA A. WATTS/
Examiner, Art Unit 1794
August 4, 2009